Appendix L

Wolf River Basin Experts Workshop: A Pilot Approach

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Introduction

The Wolf River Experts Workshop represented a pilot approach in the development of new avenues for collecting and assessing the biotic inventory information essential to the conservation of natural resources in Wisconsin and the mission of the Wisconsin Department of Natural Resources (WDNR). It was a team approach between WDNR's Bureau of Endangered Resources (BER) and Wolf River Basin Geographic Management Unit (GMU) and was designed to involve a wide range of individuals with information on the ecological resources in the basin. The collaborative effort represented by this approach took advantage of many sources of expert information and supported long-term awareness of the basin and its conservation needs. It helped to set a precedent for what WDNR hopes will be more pro-active, comprehensive, and effective approaches to basin-wide ecological inventory in the future.

Background

BER is charged with the inventory and analysis of biotic and ecological resources across Wisconsin. This task is a daunting one and presents many challenges due to the size of the state, the ecological complexity of the landscape, and the resources needed to compile meaningful inventory results and keep them current. Often, new inventory is accomplished when a specific project or problem rises to the forefront and information is needed almost immediately.

This was this situation in January of 1999 when BER staff received a request for biotic inventory information for the Wolf River Basin GMU. Three factors combined to create a challenging climate for the inventory:

1. The immense size of the basin;
2. The large amount of private land ownership, an indicator of limited existing inventory information in state records; and
3. An immediate need to supply information for WDNR planning projects in the Wolf River Basin GMU.

In an effort to meet the immediate needs for information and move towards a more proactive approach to inventory at the same time, a Design Team of BER and Wolf River Basin GMU staff collaborated on a workshop approach, using information from two different sources:

- Inventory information contributed by many different individuals (called *experts*) who have first-hand knowledge of ecologically significant sites "on-the-ground" (called *Expert Sites*).
- Inventory information compiled by technical experts, using satellite imagery and aerial photo interpretation to identify potentially significant ecological sites (called *Coarse Filter Screening Sites*).

At the workshop, participants worked together to compare the information from the two different inventory approaches and discuss priorities for future field inventory and resource conservation.

The following sections provide a summary of:

- The Workshop Design
- The Workshop Outcomes
  - Identifying the Experts
  - Collecting the Site Information
  - Conducting the Workshop
  - Evaluating the Workshop
- How Are the Results Being Used?
- An Eye to the Future: Successes to Carry Forward and Lessons Learned.

The Workshop Design

The Planning Steps

The Design Team of BER and Regional WDNR staff worked with a consultant to plan and conduct the Experts Workshop (see Attachment A for details on the Design Team and the workshop agenda). The steps in this process were to:

Step 1. Identify individual 'experts' who may have specialized knowledge of the ecologically significant sites in the Wolf River Basin.

Step 2. Collect, summarize, and map information on the Expert Sites and the Coarse Filter Screening Sites for use at the workshop.

Step 3. Conduct the Experts Workshop to assess the compiled information. The specific purposes of the workshop were to:

a) Increase participants' awareness of the ecological features of the Wolf River Basin as a whole and increase their understanding of, and support for, existing and future conservation needs.

b) Examine the number, size, and pattern of sites identified by the 'experts' and compare these to sites identified by a separate coarse filter remote sensing inventory.

c) Take a 'first cut' at working collaboratively to identify the most significant and most sensitive sites in the basin.

Step 4. Evaluate this pilot Experts Workshop approach for possible use in future inventory projects.

Who are the '*experts*' ?

For this purpose, an 'expert' is any individual with specialized knowledge of the natural communities, rare plants and animals, aquatic invertebrates, and unique natural features of the Wolf River Basin. Experts include people from federal, state, and local agencies; Native American tribes; universities, colleges, and schools; nonprofit groups such as land trusts and environmental organizations; and private citizens. We sought participants from this diversity of backgrounds – from scientists to resource managers to amateur naturalists and bird watchers – hoping to include all those with specific local knowledge of the basin's ecology and natural history. (See Attachment B for information on how the experts were identified and involved).

What is an ecologically significant area?

An ecologically significant area is one that contains important biodiversity components including, but not limited to, occurrences of rare plants or animals, well-functioning and intact natural communities, large unfragmented natural areas, potential connectivity sites, critical habitat areas, potential restoration sites, or other unique geological or natural features. Experts were invited to submit Site Information Forms and map locations for the sites they consider to be most significant in any of the above categories. (See Attachment C for a copy of the Site Information Form, Table L-1 for Expert site information, and Map 3 for the site locations).

What is Coarse Filter Screening?

The first step in the pilot project involved identifying Coarse Filter Sites. The objective of the Coarse Filter Screening was to identify sites with high potential for occurrences of rare species or high quality natural communities. Using various data sources and criteria established by BER staff, a consultant applied Geographic Information System (GIS) technology to interpret satellite imagery and aerial photographs and identify over 135 Coarse Filter sites. (See Appendix K for more information on the Coarse Filter Screening, Table K-5 for site information, and Map 3 for the site locations).

The Workshop Outcomes

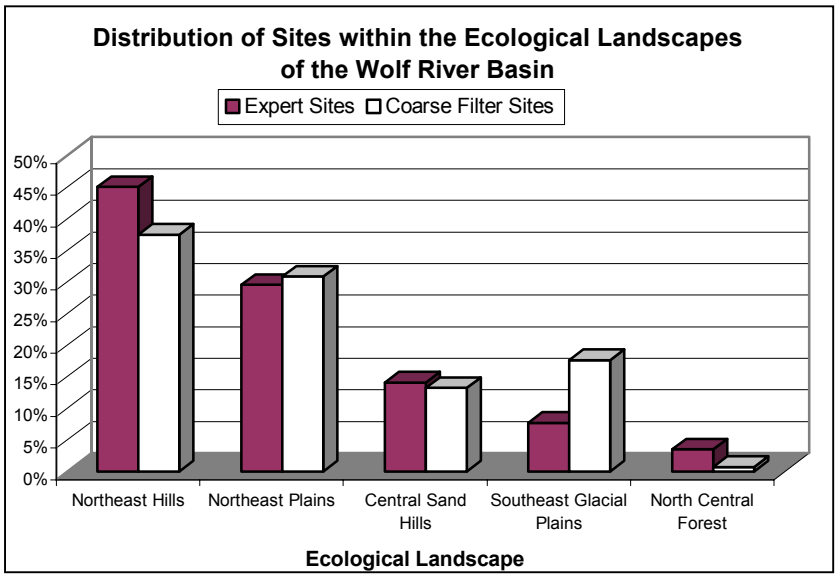
Step 1: Identify individual 'experts' who may have specialized knowledge of the ecologically significant sites in the Wolf River Basin.

The Design Team developed a list of 220 potential experts thought to have some specialized knowledge of the ecological resources within the Wolf River Basin. An introductory letter was sent to them requesting their input and assistance. Some recipients provided names of other possible experts who were later sent the letter. This looping process was used as a way to ensure that local knowledge was secured to the best extent possible. A total of 50 individuals responded self-identifying themselves as basin experts. A second letter was sent out to these 50 people requesting that they return information about sites they considered to be the most significant within the basin based on their expertise. A basin map and detailed site information forms were sent with the letter to assist in compiling information. Twenty individuals returned site information. (See Attachment B for more details on the process used to identify and involve the experts).

A total of 43 people participated in the Experts Workshop. Attendees included 20 individuals from the WDNR regions and field offices, 10 from WDNR central office, 6 from non-profit conservation or environmental groups, 1 from the Menominee Nation, 1 from U.W. Extension, 1 from the Wolf River Basin Partnership, 1 from U.W.- Superior, 1 from private business, and 2 individual citizens. In addition, of the 43 attendees:

- Twenty-one had previously self-identified themselves as experts.
- Thirteen provided site information prior to the workshop.
- Twenty-four work primarily in the Wolf River Basin.
- Twenty-two attended as participant/observers. Of these, 12 were familiar with the Wolf River Basin but did not consider themselves to have expert knowledge of ecological sites, and 10 attended out of interest in the workshop process and had little or no specialized knowledge of the Basin.

Step 2: Collect, summarize, and map information on the Expert Sites and the Coarse Filter Screening Sites for use at the workshop.



Expert site information was gathered over a three-month period, as described above and in Attachments B and C. Twenty experts identified a total of 142 sites within the basin (see Table K-1). Some sites overlapped others - this usually reflected a different type of information for the same area (e.g., breeding birds from one expert and rare plants from another).

A total of 135 non-overlapping Coarse Filter Screening sites were identified, described, and mapped in the months preceding the workshop, as described in Appendix K and Table K-5.

The above chart illustrates the distribution of Expert and Coarse Filter Screening sites within each of the ecological landscapes of the Wolf River Basin. The location of each site was mapped for use at the workshop (see Map 3), and a large poster-sized copy was printed for each small group of 7-8 people. The printed information on each site was compiled into 2 sets of spreadsheets, one for the Expert sites and one for the Coarse Filter Screening sites (site spreadsheets are included in Tables K-5 and L-1).

Step 3: Conduct the Experts Workshop to assess the compiled information.

The results are discussed in relation to each of the workshop's purposes:

a) Increase participants' awareness of the ecological features of the Wolf River Basin as a whole and increase their understanding of, and support for, existing and future conservation needs.
   - The workshop succeeded in gathering a varied group of individuals who expanded their knowledge of the Wolf River Basin and participated in well-facilitated small groups.
   - On the whole, participants seemed to appreciate the opportunity to view the entire river basin and work in a small group with more varied expertise than they experience on an everyday basis.
   - The large poster-sized Wolf River Basin maps provided to each small group served as an effective communication tool, drawing people together and encouraging lively conversation.
   - The group of participants was less diverse than the Design Team hoped it would be, especially in terms of non-WDNR participation, and this may have limited the opportunity for some participants to expand their understanding. (Thirty of the 43 workshop attendees, or 70 percent, were WDNR employees).
   - Participants recognized that, with effective follow through, the workshop might represent a significant step towards future conservation efforts in the basin.

b) Examine the number, size, and pattern of sites identified by the 'experts' and compare these to sites identified by a separate coarse filter remote sensing inventory.

Workshop attendees were separated into six small groups, according to their area of expertise within the ecological landscapes of the Wolf River Basin. They were asked to consider the following questions while reviewing the map and comparing the two sets of sites.

Small Group Question A. What do you notice about the number, size, and pattern of Sites located throughout the entire Basin? How does the location of Expert Sites compare/contrast to the Coarse Filter Screening sites?

- There are fewer expert sites in the northern part of the basin as compared to the southern part and as compared to the coarse filter sites.
- Expert sites include a disproportionate emphasis on river corridors as compared to the coarse filter sites.
- There is more information that could come from experts, especially for upland and forested areas in the southern part of the basin, additional river corridors and wetland sites, and across the northern part of the basin.

Small Group Question B. Are there areas not covered by either Expert or Coarse Filter Screening Sites, and where are they located?

- It was noted that the Coarse Filter Screening did not identify many sites in the northern and northeastern portion of the basin. Neither Expert nor Coarse Filter Screening sites were well represented in the northeast.
- Each small group made a list of specific areas within their assigned ecoregion where sites were not identified.

c) To take a 'first cut' at working together to identify the most significant and most sensitive sites in the basin.

Each small group was asked to examine and compare all of the sites in their assigned ecological landscape (ecoregion) and recommend which are the most significant, according to criteria listed on Significance Ranking Worksheets (see Attachment D). Sites not identified by Experts or the Coarse Filter Screening but deemed important by the group were also included.

The small groups initially nominated 56 total sites, and by the end of the session, narrowed the list to 38 "Sites with High Potential for Conservation and Inventory." (See Map 4 and Appendix H). These 38 high potential sites encompass 587,868 acres, or 25 percent, of the Wolf River Basin. The entire Menominee Indian Reservation was included as a single site, totaling 240,985 acres or 10 percent of the entire basin. Without the Menominee Indian Reservation, the remaining sites account for 246,883 acres, or 15 percent of the Basin. The sites were distributed within the ecological landscapes in the following manner:

- Northeast Hills – North 7 sites
- Northeast Hills – South 11
- North Central Forest 1
- Northeast Plains 11 sites
- Southeast Glacial Plains 3
- Central Sand Hills 5

Only one of the small groups had time to start the next step, that of identifying the most sensitive sites, and this group only took the first step of listing the issues that might be involved in this type of assessment.

<u>Step 4.</u> Evaluate this pilot Experts Workshop approach for possible use in future inventory projects.[1]

a) Was the workshop successful from the participants' perspectives?

Most participants felt that "the meeting was well planned and well facilitated and felt that their time was well spent." Of 29 participants, 22 (76%) agreed with this statement, 5 (17%) were neutral, and 2 (7%) disagreed.

Even though the technical aspects of the workshop purposes were largely met (comparing the coarse filter and expert sites, and taking a first cut at identifying significant sites), participants were somewhat frustrated by not accomplishing more visible and detailed results.

Participants are interested in knowing about the results of the workshop and especially learning that it contributes to the conservation efforts in the basin in the long run.

And, many participants appreciated the effort put forth to plan and conduct the workshop, recognized that it is a first step, and encouraged those involved to keep the work going.

In the qualitative responses, many participants reported that they found the workshop personally satisfying for these kinds of reasons:

- They felt they benefited from learning about the Wolf River Basin as a whole.
- They found hope in the possibility that this work will help conserve the basin's resources.
- They enjoyed the interaction and opportunity to participate.
- They learned new things about the Wolf River Basin.
- They appreciated the wealth of knowledge in the room.
- The small groups were well facilitated and provided the opportunity to be well heard and to listen well to others.
- The large map of the Wolf River Basin with coarse filter and expert sites was clear and easy to use.

Although the most of participants reported that their time was well spent, many that felt that the experience was only somewhat or partly satisfying for a number of different reasons:

- Their small group lacked the expertise it needed to do the assigned small group work well.
- They wished they had clear, systematic criteria for evaluating the sites.
- They felt that the meeting records do not adequately reflect the depth and detail of knowledge shared in the small group conversations.
- Many experts who have important information to share were not present.

[1] [1]Information from this section comes from written workshop evaluations that had both qualitative (open-ended questions) and quantitative (scaled responses) components and from BER and Design Team debriefings facilitated by the consultant.

- They felt that they needed to receive the information in advance of the meeting to be better prepared.
- They were frustrated by interactions in their small group.
- The spreadsheets of coarse filter and expert sites were difficult for some people to use.
- The room noise was distracting, and the room lighting made the map difficult for some to see.

A few participants were very dissatisfied for some of the above reasons, and also because:

- They did not find the workshop approach meaningful, personally or technically.
- They did not understand the purposes of the workshop.
- They felt that they did not have the personal expertise they needed.
- They did not learn anything they didn't know before.

Participants made a number of specific suggestions for what might have been done differently:

- Make sure that the group as a whole and each of the small groups have members with the expertise they need to do the work.
  - Some participants listed additional areas of expertise that were needed, and others suggested additional experts by name.
- Provide clear criteria or standards for evaluating sites.
- Keep a record of individuals' rich verbal contributions on the characteristics and value of the sites.
- Take steps to ensure that more local expert knowledge is in the room.
- Regarding the large basin map of coarse filter and expert sites:
  - Include more indicators to help participants orient themselves, e.g., roads, and cities.
  - Make the borders more distinct.
- Regarding the coarse filter and expert spreadsheets:
  - Color-code the coarse filter and expert packets.
  - Integrate the coarse filter and expert information.
  - Show who nominated each expert site and indicate who they are.

Although in the quantitative evaluation, about 70% of those responding agreed that the morning overview session was helpful, the qualitative responses drew some mixed comments.

- Some appreciated the morning presentations and found them worthwhile.
- Others suggested that it could be shortened and provided more overview than was needed to support participation.

Other parts of the quantitative evaluation revealed that:

- About 76% of the participants agreed that the large basin maps on each small group table at the workshop were clear and easy to use.
- About 70% agreed that the participant folders and other handouts provided the information needed to participate.
- About 68% agreed that their small group in Work Session 1 understood what was expected and was able to work effectively to complete the assigned tasks, and about 76% agreed that this was true for Work Session 2.
- About 63% agreed that the purposes of the workshop were clear.

- About 50% agreed that the spreadsheets with information on the Expert and Coarse Inventory Sites were clear and easy to use.
- About 46% agreed that the process for identifying people and groups with expert information on the Wolf River Basin was effective.
- About 23% agreed that there were enough "experts" with specific knowledge of the Wolf River Basin in their small group.

b) Was the workshop successful from the BER program and Design Team perspectives?

WDNR staff debriefings following the workshop confirmed that the workshop achieved its primary goals and agreed in general with the majority trends in the above participant evaluation. These staff debriefings also offered some additional perspectives:

- The workshop results are having some immediate benefits for the continuing field inventory as BER researchers and Wolf River Basin GMU field experts work together to select and find access to specific inventory sites.
- The workshop reinforced the Wolf River Bottomlands master planning approach to focus on the river corridor as a whole, rather on separate properties. Workshop results are also helping to provide the rationale for proposed project boundaries for the master plan.
- New approaches that combine Coarse Filter and Expert information will be among those essential to the inventory and assessment of large landscapes characterized by a matrix of public and private land ownership.
- The workshop approach allowed participants to work side-by-side with inventory scientists and gain appreciation of what is involved in the inventory process.
- While the workshop itself was successful, how it fit into the timing of the inventory process was of concern to staff. For example:
  - The workshop results would have been more useful if the workshop occurred at the beginning, rather than in the middle of the overall inventory project.
  - The Wolf River Bottomlands master planning open houses offered an opportunity to seek and involve more potential experts and local people. This opportunity could have been used more effectively if the timelines were better coordinated.
  - If the Experts had the Coarse Filter Screening results before they submitted their site information, more specific requests for on-the-ground verification and for additional sites could have been made.
- There is a tradeoff in the design of this kind of workshop between two equally important types of outcomes: those that build relationships between people and partner groups and those that result in technical assessments of detailed site information.
- The Coarse Filter sites appeared to provide BER staff with more accurate information to plan future inventory than the Significant Sites identified at the workshop because: there was previous experience with the Coarse Filter Screening methodology (whereas the entire expert site methodology was new); BER staff were involved in refining the criteria used for Coarse Filter work, the Coarse Filter sites are smaller and easier to field check; and the Coarse Filter Screening was more complete in its coverage of the entire basin.

How Are the Results Being Used?

Some of the workshop results are of immediate use as field inventories are continued in the Wolf River Basin and the Biotic Inventory and Analysis for the Wolf River Basin is completed. Other benefits will become apparent as the inventory is completed and updated over time, and the results are made available to help plan and conduct conservation planning and programs.

Specifically, the BER and Wolf River Basin GMU staff are using the results of the workshop to:

- Support effective collaboration between BER inventory scientists and GMU field staff to select and access inventory sites for the year 2000 field season.
- Complete an interim BER inventory and analysis and provide the results to the Wolf River Basin GMU staff as they:
  - Complete the upcoming State of the Basin report.
  - Undertake master planning for the cluster of Wolf River Bottomlands properties.
  - Provide the GMU Partnership Team with information.
  - Support the needs of other agencies, land trusts and other nonprofit groups, and private landowners in the basin.
- Continue to evaluate the effectiveness of the expert workshop approach to basin inventory and analysis over the long term as field inventories and the biotic inventory and analysis are completed and the results are applied to conservation activities in the basin.

An Eye to the Future: Successes to Carry Forward and Lessons Learned

The following is a summary of what was learned through this pilot Wolf River Basin Experts Workshop. It is hoped that this reflection will serve as a guide to future basin or large-scale biotic inventory projects where the combined knowledge of WDNR staff, local citizens, and other scientists and partners is sought.

What did we do that we led to our success? What would we do just the same another time?

- Use the Design Team approach – build the work on an effective collaboration between BER staff and the GMU staff in the regions.
- Use a perspective that includes the entire basin (or large landscape unit or ecoregion), and seek to create common understanding of its ecology and conservation needs.
- Use the Ecological Landscapes (ecoregion) boundaries to support consistency and understanding of this tool among WDNR staff and partners.
- Identify individuals who are skilled facilitators for the small group work sessions and provide them with a detailed orientation before the workshop.
- Use carefully designed work sessions that allow participants to work alongside BER staff and experience first-hand some of the thinking and challenges that go into a basin-wide inventory of this type.

- Provide each small group with its own poster-sized working copy of the large basin map showing Expert and Coarse Inventory Sites.

- Agree on clear workshop purposes that can be used to evaluate success.

What did we learn that we might we do differently another time?

- Improve the involvement of non-WDNR experts by allowing more time for this phase, doing more "loops of search" for experts and making more personal contacts. Employ a variety of strategies to:
  - locate experts
  - ask them to help identify other experts
  - seek site information
  - invite them to the workshop

- Expand Design Team membership to include representation of the range of participants being sought.

- Once experts are identified, seek more information on what encouraged or discouraged them to participate. For example:
  - Why, of the 42 self-identified experts, did only 20 return Site Information Forms?
  - Of the 220 potential experts, why did only 42 self-identify as having the expertise sought?

- Some individuals with important site information may not think of themselves as experts. Find ways to encourage participation that works through this barrier.

- Complete the Coarse Filter Screening before involving the experts to create more ease in asking individuals to provide on-the-ground details on the sites identified or for additional sites that were missed.

- Consider improvements to the morning overview session. Plan with these questions in mind:
  - What do participants absolutely need to know to participate in the small group work sessions?
  - How can we provide this in a way that recognizes diverse learning styles?
  - How can we provide this in a way that recognizes varied amounts of previous knowledge?

- Collect some of the rich conversation in the small group work sessions by adding a row to the Significant Sites Chart from Work Session 2 (see Attachment D). Here, participants would work together to describe in their own words the key attributes of the significant ecological sites they are nominating.

- Integrate the separate Coarse Filter and Expert spreadsheets, so there is only one easily referenced document for participants to access supporting data on all the sites.

- Clarify the most effective role at the workshop for the observer/participants who do not have specific expertise on the basin.

- Consider workshop design alternatives to address the tension between outcomes that build relationships between people and partners and outcomes that result in technical assessments of detailed site information.
  - For example, plan to host two separate events. The first might be an open house format, and the second a more intensive workshop. The first would build relationships among diverse people and partners with interest in the basin inventory, allow time for those with information

to gain confidence in the process, and position the Design Team to gather as much site information from as many different sources as possible. The second would involve those who are interested to help produce specific technical assessments and recommendations.

- In addition to the large landscape approach, consider applying this Expert Workshop approach to smaller geographic areas and hone in more intensively on identifying and working with people with local knowledge of the resources.

Attachment A. The Workshop Design and Agenda

The Design Team

A Design Team comprised of WDNR staff from the Wolf River Basin GMU, the Bureau of Endangered Resources (BER) in Madison, and a private consultant planned the workshop.

All members of the Design Team helped to:

- Agree on the workshop purposes
- Identify potential experts with knowledge of specific sites
- Review methods for collecting Site Information from those experts
- Review the agenda and letters of invitation
- Evaluate the workshop process and outcomes

The GMU staff took the lead to:

- Make local arrangements for meeting space and meals
- Locate equipment and supplies
- Line up small group facilitators
- Communicate with regional WDNR staff

BER staff were responsible to:

- Provide team leadership
- Compile all the Expert Site Information on spreadsheets and producing the Wolf River Basin map showing both expert sites and the coarse filter screening sites
- Contract with a consultant to design, facilitate, and report on the workshop

Wolf River Basin Experts Workshop

December 3, 1999

Purpose of the Workshop:

- Increase our common understanding of the ecological features of the Wolf River Basin
- Compare the results of the coarse filter screening with the information compiled from individual experts
- Take a 'first cut' at identifying the most significant and most sensitive sites in the basin
- Evaluate this pilot approach to basin inventory

Agenda

9:00 a.m. Welcome, Introductions, and Agenda Review

9:20 Overview
   a. Ecology of the Wolf River Basin
   b. The Coarse Filter Screening Sites
   c. The Expert Site Information

10:00 BREAK – move to assigned small groups

10:15 Work Session 1. A Profile of the Wolf River Basin as a Whole
   a. What do you notice about the number, size, and pattern of Sites located throughout the entire Basin? How does the location of Expert Sites compare/contrast to the Coarse Filter Screening sites?
   b. Are there areas not covered by either Expert or Coarse Filter Screening Sites, and where are they located?
   c. For your assigned ecoregion: working with the map and spreadsheets, each person is asked to select <u>one</u> Site that you find especially interesting to "introduce" to your small group – and indicate why you chose it.

11:45 LUNCH

12:30 p.m. Work Session 2. The Wolf River Basin by Ecoregion
   - North – Northeast Hills
   - South – Northeast Hills
   - NE Plains/SE Glacial Plains
   - Central Sand Hills

   a. *What are the most significant sites in the basin – and why?*
   b. *What are the most sensitive sites in the basin – and to what?*

2:00 BREAK

2:15 Clarifying the Next Steps
   a. Completing the inventory and adding to the NHI database
   b. Using the results of the completed inventory and analysis
   (State of the Basin, GMU Partnership, state property master planning, other)

2:45 Evaluation

3:00 Adjourn

<u>Group Agreements</u>

- Create space for everyone to participate
- Help keep us on topic and on time – use the *woodpile*
- Note and record different opinions; agreement is not essential
- Help evaluate this workshop approach

Attachment B. The Search for Local Knowledge: Involving the *Experts*

Identifying Potential Experts

The Design Team (See Attachment A) prepared an initial list of 220 'potential experts' for the Wolf River Basin. An introductory letter was sent out asking the 220 people if they have specialized knowledge of ecologically significant sites in the Wolf River Basin, and/or if they know of others who do. Through this process, a total of 228 introductory letters were sent out within a 6 week time period.

Of the 228 contacts, 50 individuals responded to the letter self-identified themselves as having specialized knowledge. These included 31 individuals that work primarily outside of the basin and yet have expert knowledge about the basin. The breakdown of these individuals by affiliation and geographic area is:

Self-identified Experts by Affiliation:

• WDNR	21
• Non-profit organizations	10
• University/Extension	8
• Individuals/no affiliation noted	6
• County	2
• Business	2
• Tribal	1
	50

Self-identified Experts by Geographic Area:

• Work primarily within Basin	19
• Work primarily outside Basin	31
	50

Requesting Site Information

A second mailing was sent to the 50 experts identified above requesting they provide information, based on their specialized knowledge, on the most ecologically significant sites within the basin. They received a detailed map of the basin and set of Site Information Forms (Attachment C) to return within a 2-week period. Twenty of these experts returned completed Site Forms and maps, providing information on 142 sites. The individuals included:

Experts Providing Site Info by Affiliation:

• WDNR	9
• Non –profit organizations	6
• University/Extension	2
• Individuals/no affiliation noted	2
• Business	1
• County	0
• Tribal	0
	20

1

Experts Providing Site Info by Geographic Area:

• Work primarily within Basin	9
• Work primarily outside Basin	11
	20

Attending the Workshop

Forty-three individuals attended the Wolf River Basin Workshop, including 21 that self-identified themselves as Experts and 22 that were participant/observers. Of the 21 self-identified experts, 13 sent in site information. The 22 participant/observers represented 8 Design Team members, 4 BER field staff, and 10 others attended due to interest in the workshop process (without specialized knowledge of sites in the Wolf River Basin).

Workshop Attendees by Affiliation:

• WDNR – Field Staff	20
• WDNR – Central Office	10
• Non-profit groups	6
• University/Extension	2
• Individuals/no affiliation noted	2
• Wolf R. Basin Partnership	1
• Business	1
• Tribal	1
• County	0
	43

Workshop Attendees by Geographic Area:

• Work primarily within Basin	24
• Work primarily outside Basin	19
	43

Attachment C. The Site Information Form

State of Wisconsin
Department of Natural Resources
P.O. Box 7921 ER/4, Madison WI 53707-7921

Wolf River Basin Site Information

Notice: Completion of this form is voluntary. Data collected will be used to supplement the biotic inventory of the Wolf River Basin. Personal information collected on this form is intended to be used to contact you if WDNR staff require additional information and for no other purpose.

Site ID #

Provider Name

Site Name

Ecological Information

Type of Information (check all that apply)**:**

- ❑ Natural Community(ies):_____
- ❑ Plant(s):_____
- ❑ Animal(s):_____
- ❑ Geologic Feature(s):_____
- ❑ Other:_____

Describe the Significance of the Site:

Describe possible threats or future changes:

Information Format

Information on this site is stored as:

- ❑ Maps
- ❑ Database or Spreadsheet
- ❑ Field Notes
- ❑ Journal/Article
- ❑ Other_____

Will You Attend the Workshop on Dec. 3?

- ❑ Yes
- ❑ No

Additional information and comments about this site can be added to the back of the form

Site Location

County:_____

T-R-S (to ¼ section)**:**_____

USGS Quadrangle:_____

Habitat Type:

Upland Aquatic

- ❑ grass, prairie
- ❑ forest
- ❑ wetland
- ❑ stream, river
- ❑ lake, pond
- ❑ other:_____

Describe:_____

Describe the Surrounding Land Use:

Accuracy of Site Boundary:

- ❑ ¼ mile
- ❑ 1 mile
- ❑ 5 miles

Estimated Size (acres):_____

Ownership: ❑ Public ❑ Private

Please review the instruction sheet on the back for directions on how to fill out the Site Form. Two examples are also provided for your use. An electronic version of this form is available upon request. If you have any questions, please call Andy Galvin at 608-264-8968.

Please Return Site Forms & map by November 5

Thank you for your efforts

Site Form Directions

The following are descriptions of each of the categories on the Site Form. Please fill out the Site Forms to the best of your ability. We recognize that some categories may be left blank because information is not available, or the quantity of information is too large. In such cases, focus first on the Ecological Information and second on the Site Location. If you do not have some of the other detail, we will do our best to help fill it in as needed.

Site ID#: your first, middle and last name initials - site # in numerical order starting with 01. (i.e. Fred Joe Smith would put FJS-01, FJS-02, FJS-03, etc.)
Please be sure the site ID# is also on the map.

Site Name: provide a name that will distinguish it from all others. Base it on location first and the site's features second (i.e. Bear Creek Pines, Black Creek Marsh, Thornton Heron Rookery)

Provider Name: your name

Ecological Information

Type of Information: what information do you have about the natural communities, species and other significant resources that occur at the site? Check all that apply and provide specific names if available.

Significance of the Site: what is significant about the site that makes it one of the most important in the basin?

Threats and Changes: do you foresee any changes to the site that will threaten the ecology of the site (i.e. impending development, proposed project, change in land use, etc.)?

Site Location

County: name of County

T-R-S: all town-range-sections included in the site down to ¼ section if possible.

USGS Quadrangle: name of USGS 7.5 minute quadrangle

Habitat Type: based on the primary habitat types of the site, check all that apply. If possible, briefly describe associated plant species, soils, slope, etc.

Surrounding Land Use: is the site surrounded by forest, farm, developed areas, wetlands, etc.?

Accuracy of Boundary: what is the level of confidence in the ecological boundaries of the site as drawn on the map: are they accurate within ¼ mile, within 1 mile, or within 5 miles?

Estimated Size: in acres

Ownership: is the site publicly or privately owned?

Information Format

Information Format: how is the information on this site stored or documented?

Please note the information you provide will become public information. Please portray the information to a level you feel comfortable with. If you are interested in providing data to the NHI database, Heritage staff will work with you to more precisely define your information.

If you have any questions on how to fill out the Site Form or to identify sites on the map, please call Andy Galvin at 608-264-8968 for assistance.

Additional Comments about the Site:_____

TABLE L-1
Expert Sites
Information provided in Table L-1 was taken directly from the Site Information Forms provided by submitting experts and has not be field verified by BER

Site ID	Source	Site Name	Acres	Resources of Significance	Threats/Disturbance Facors	Ecol Info	Habitat	Surrounding Land Use	Ecological Landscapes	County	Owner-ship
FOR03	CM-09	Pickerel Lake SNA		Eagle and osprey nests		a	L		North Northeast Hills		
FOR03	GWD-02	Pickerel Lake SNA		Natural Area		nc			North Northeast Hills	Port	
FOR03	SAN-01	Pickerel Lake SNA	1299	High floristic quality (Nichols 1999, J. Lake & Reservoir Mgmt.)		nc, p	L		North Northeast Hills	Forest, Langlade	
FOR04	RGE-11	Bog Brook SWA	800	Undeveloped; emergent communities	Development	nc, p, a	W, L	forest, houses	North Northeast Hills	Forest	Pub/Priv
FOR05	RGE-10	Shoe and Himley Lakes	400	Undeveloped lakes	Development	nc, p, a	W, L	forest, houses	North Northeast Hills	Forest	Pub/Priv
FOR06	RGE-09	Oak and Duck Lakes	100	Undeveloped lakes; rare and threatened plants	Crandon mine, Development	nc, p, a	W, L	forest, recreation, mining	North Northeast Hills	Forest	Private
FOR07	RGE-08	Pickerel Creek	1400	Cedar forest; mature pines	Logging, Crandon mine	nc, p, a	F, W, S	forest, recreation	North Northeast Hills	Forest, Langlade	Pub/Priv
FOR08	MM-11	Rice Lake Barrens		Black terns, trumpeter swan release		a	W, L		North Northeast Hills		
FOR10	RGE-03	Little Rice SWA	1500	Wild rice bed; waterfowl area; communities	Development	nc, p, a	W, S, L	forest, houses	North Northeast Hills	Forest	Pub/Priv
FOR11	RGE-02	Wolf River headwaters	5 miles	Undeveloped Wolf River area	Logging	nc, p, a	F, W, S	forest	North Northeast Hills	Forest	Pub/Priv
FOR12	MP-01	Pine Lake Area		Significant bird species	Crandon Mine	nc	F, W, L		North Northeast Hills	Forest	
FOR12	SAN-04	Pine Lake Area	1670	High floristic quality (Nichols 1999, J. Lake & Reservoir Mgmt.)		nc, p	L		North Northeast Hills	Forest	
FOR13	RGE-01	Hiles Mill Pond	2500	Dam impounds a wetland with significant plant communities	None known	nc, p, a	W, S, L	forest (USFS)	North Northeast Hills	Forest	Pub/Priv
LAN15	RH-42	Garfield Rapids Forest		NM forest, sugar maple, basswood, hemlock	Logging, recreation, development	nc	F, S		South Northeast Hills	Langlade	
LAN16	SAN-06	Florence Lake	53	High floristic quality (Nichols 1999, J. Lake & Reservoir Mgmt.)		nc, p	L		South Northeast Hills	Langlade	
LAN17	RH-44	Flora Spring Pond SNA (Area)		Spring pond w/ white cedar forest		nc, g	F, W, S		South Northeast Hills	Langlade	
LAN18	RH-43	Oxbow Rapids SNA		Spring seeps w/ WM forest		nc, g	F, W		South Northeast Hills	Langlade	
LAN19	CM-11	Sawyer Lake		Eagle nest		a	L		South Northeast Hills	Langlade	
LAN20	CM-02	Burnt Point Deer Yard		Deer yard		a	F, W, S		South Northeast Hills	Langlade	
LAN21	LJS-01	Baker Lake Area	300	Mature trees and ground cover; rare birds; glacial features	Logging	p, a, g	F	forest	North Northeast Hills	Langlade	Public
LAN22	RH-45	Fischer Lake		Undeveloped lake		nc, p	L		North Northeast Hills	Langlade	
LAN23	CM-03	Squaw Creek Deer Yard		Deer yard		nc, a	F, W, S		North Northeast Hills	Langlade	
LAN24	CM-13	Turtle Lake		Wild rice bed, eagle nest		p, a	F, W, S, L		North Northeast Hills		
LAN24	RH-46	Turtle Lake		Spring pond		nc	L		North Northeast Hills	Langlade	
LAN25	CM-07	Pickerel Creek Wolf R		Wild rice bed, eagle nest		nc, p, a	W, S		North Northeast Hills	Langlade	
LAN26	RGE-12	Pickerel Creek/Wolf River	600	Wild rice bed; emergent communities	Development	nc, p, a	W, S	forest, houses	North Northeast Hills	Langlade	Pub/Priv
LAN27	CM-14	Hunting River		Osprey nest		a	F, W, S		North Northeast Hills		
LAN27	RH-47	Hunting River		Springs, wild rice, alder thicket		nc, p	W, S		North Northeast Hills	Langlade	
LAN28	CM-10	Miniwakin Lake		Eagle nest		a	L		North Northeast Hills		
LAN28	MM-09	Miniwakin Lake		Trumpeter swan release sites		a	L		North Northeast Hills		
LAN28	RGE-13	Miniwakin Lake		Undeveloped lake; wild rice beds; emergent communities	Development	nc, p, a	W, L	forest, houses	North Northeast Hills	Langlade	Pub/Priv
LAN29	SAN-08	Loon Lake	45	High floristic quality (Nichols 1999, J. Lake & Reservoir Mgmt.)		nc, p	L		North Northeast Hills	Langlade	
LAN30	CM-04	Spider Creek Deer Yard		Wild rice bed, eagle nest, deer yard		p, a	F, W, S		North Northeast Hills	Langlade	
LAN31	RGE-07	Spider Creek Wetland	5000	Large forested wetland	Logging	nc, p, a	W	forest, recreation	North Northeast Hills	Forest, Langlade	Pub/Priv
LAN32	SAN-07	Hollister Lake	41	High floristic quality (Nichols 1999, J. Lake & Reservoir Mgmt.)		nc, p	L		North Northeast Hills	Langlade	
LAN33	MM-10	Spider Creek Flowage		Trumpeter swan release sites		a	L		North Northeast Hills		
LAN34	CM-08	Rolling Stone Lake		Eagle nest		a	L		North Northeast Hills		
LAN34	MP-02	Rolling Stone Lake		Black spruce-tamarack bog; significant bird species	Crandon Mine	nc, a			North Northeast Hills	Langlade	
LAN34	SAN-09	Rolling Stone Lake	672	High floristic quality (Nichols 1999, J. Lake & Reservoir Mgmt.)		nc, p	L		North Northeast Hills	Langlade	

Site ID	Source	Site Name	Acres	Resources of Significance	Threats/Disturbance Facors	Ecol Info	Habitat	Surrounding Land Use	Ecological Landscapes	County	Owner-ship
LAN35	CM-05	Pickerel Creek Wolf R		Deer yard		nc, a	F, W, S		North Northeast Hills	Langlade	
LAN36	BER	Flora Spring Pond SNA		DNR State Natural Area					South Northeast Hills	Langlade	Public
LAN37	CM-01	Nine Mile Hill Bear Caves		Glacial landforms		nc, g	O		South Northeast Hills	Langlade	
LAN39	PS-01	Woods Flowage SFA	2000	Unique coldwater complex; trout, inverts		nc, a, g	F, W, S, L	forest, agr, recreation	South Northeast Hills	Langlade	Pub/Priv
MEN01	RH-30	Rice Lake Barrens		Barrens and dry ND forest, unique for basin		nc	G, F		North Central Plains/ Southeast Glacial Plains	Shawano, Menominee	
MEN02	RH-39	Gardner Creek Cedar		Old growth white cedar, bird diversity		nc, p	F, W		South Northeast Hills	Menominee	
MEN03	RH-40	Red River Island		Virgin white pine and NM forest		nc			South Northeast Hills	Menominee	
MEN04	RH-41	Menominee Creek		Old growth white cedar		nc	F, W		South Northeast Hills	Menominee	
MEN05	BRH-05	Menominee Indian Reservation		Many nesting birds, neotropical migrants	population growth, urban expansion	nc, p, a	F	forest	South Northeast Hills	Menominee	Tribal
MEN05	MM-07	Menominee Indian Reservation		Upland hardwood conifer forest, breeding birds		nc, p, a	F, W, S		South Northeast Hills		
MRN09	RH-36	Goto Lake Bog		NW forest and bog		nc	F, L		South Northeast Hills	Marathon	
MRN09	MJB-01	Norrie Bog	650	Intact varying-age spruce-tamarack bog; rare birds	Logging, cranberries?	nc, a	W, L	agr	South Northeast Hills	Marathon	Private
MRN10	RH-37	Camp Creek Bog		NW forest and bog		nc	W		South Northeast Hills	Marathon	
MRN11	RH-38	Comet Road Woods		Large patch of M forest, spring ephemerals		nc, p	F		South Northeast Hills	Marathon	
MRN12	MJB-02	Comet Creek Headwaters	550	Diverse forested lowland; Trees spp-rich; Blue-headed vireo	Logging	nc, a	W, S	forest, agr	South Northeast Hills	Marathon	Private
ONE01	SAN-03	Lower Post Lake	377	High floristic quality (Nichols 1999, J. Lake & Reservoir Mgmt.)		nc, p	L		North Northeast Hills	Langlade	
ONE01	CM-06	Upper Post Lake		Wild rice beds		p	W		North Northeast Hills	Langlade	
ONE01	SAN-02	Upper Post Lake	757	High floristic quality (Nichols 1999, J. Lake & Reservoir Mgmt.)		nc, p	L		North Northeast Hills	Langlade, Oneida	
ONE02	RGE-06	Wolf River North of Post Lake	1500	Undeveloped river; old growth forest; bird species	Development, logging	nc, p, a	W, S, L	forest, recreation	North Northeast Hills	Oneida	Pub/Priv
ONE03	MM-08	Lake Lucille		Trumpeter swan release sites		a	L		North Northeast Hills		
ONE03	RGE-05	Lake Lucille		Undeveloped lake; emergent communities; bird species	Development	nc, p, a	W, L	forest, houses, recr	North Northeast Hills	Oneida	Private
ONE04	RGE-04	Wolf River Rice Beds	2500	8 mile remote, wild area; rice beds; cedar forest	Development, logging	nc, p, a	F, W, S	forest, houses	North Northeast Hills	Forest, Oneida	Pub/Priv
OUT17	DDT-04	Black Otter Lake		Good bird habitat along abandoned railway trail and lake		nc, a	F, W, L		North Central Plains/ Southeast Glacial Plains	Outagamie	
OUT18	DDT-02	Hortonville Bog SNA (Area)		Neotropical migrant nesting area (Cerulean, Prothonatory warblers, etc)		nc, a	W		North Central Plains/ Southeast Glacial Plains	Outagamie	
OUT19	KK-03	Walleye Spawning Marshes		Known or historically identified walleye spawning areas	Development, changes in vegetation, changes in water flow (volume and direction)	nc, a, g	W, S, R	urban, agr, natural river bottomland	North Central Plains/ Southeast Glacial Plains	Shawano, Outagamie, Waupaca	Pub/Priv
OUT20 OUT28	TAC-05	LaSage SWA	500	Spawning marsh area; Native American historic site	Neglect	nc, p, a, g, o	F, W, S, L	agr	North Central Plains/ Southeast Glacial Plains	Outagamie	Public
OUT21	MM-05	Embarrass River-New London		Heron, egret rookeries		a	F, W, S		North Central Plains/ Southeast Glacial Plains	Outagamie	
OUT22	KK-04	Walleye Spawning Marshes		Known or historically identified walleye spawning areas	Development, changes in vegetation, changes in water flow (volume and direction)	nc, a, g	W, S, R	urban, agr, natural river bottomland	North Central Plains/ Southeast Glacial Plains	Shawano, Outagamie, Waupaca	Pub/Priv
OUT23	BRH-04	Bischoff Rd Wetlands		Shorebird stop-over, waterfowl feeding and nesting site	DOT management and mitigation	a	W	agr	North Central Plains/ Southeast Glacial Plains	Outagamie	Public
OUT24	DDT-01	Shiocton Waterfowl Areas		Spring waterfowl concentration; shorebirds	Lack of DOT, farmer's management	nc, a	W, S, O	agr	North Central Plains/ Southeast Glacial Plains	Outagamie	Pub/Priv
OUT25	KK-05	Walleye Spawning Marshes		Known or historically identified walleye spawning areas	Development, changes in vegetation, changes in water flow (volume and direction)	nc, a, g	W, S, R	urban, agr, natural river bottomland	North Central Plains/ Southeast Glacial Plains	Shawano, Outagamie, Waupaca	Pub/Priv
OUT26	KK-06	Walleye Spawning Marshes		Known or historically identified walleye spawning areas	Development, changes in vegetation, changes in water flow (volume and direction)	nc, a, g	W, S, R	urban, agr, natural river bottomland	North Central Plains/ Southeast Glacial Plains	Shawano, Outagamie, Waupaca	Pub/Priv
OUT27	KK-07	Walleye Spawning Marshes		Known or historically identified walleye spawning areas	Development, changes in vegetation, changes in water flow (volume and direction)	nc, a, g	W, S, R	urban, agr, natural river bottomland	North Central Plains/ Southeast Glacial Plains	Shawano, Outagamie, Waupaca	Pub/Priv

Site ID	Source	Site Name	Acres	Resources of Significance	Threats/Disturbance Facors	Ecol Info	Habitat	Surrounding Land Use	Ecological Landscapes	County	Owner-ship
OUT28	BRH-02	Deltox Marsh		Waterfowl, shore and wetland bird breeding and feeding site	non-point pollution (agric.)	a	W, P	agr, wetl	North Central Plains/ Southeast Glacial Plains	Winnebago	Public
OUT29	RH-32	Shaky Lake SNA		Bog, rare plants, wood turtle		nc, p, a	W, L	agr, forest	North Central Plains/ Southeast Glacial Plains	Outagamie	
OUT30	BER	Hortonville Bog SNA		DNR State Natural Area					North Central Plains/ Southeast Glacial Plains	Outagamie	Public
OUT30	MM-04	Hortonville Bog SNA		Bog, breeding bird area		nc, a	W		North Central Plains/ Southeast Glacial Plains	Outagamie	
OUT30	RH-33	Hortonville Bog SNA		Rare plants and animals		nc, p, a	W		North Central Plains/ Southeast Glacial Plains	Outagamie	
OUT31	DDT-03	Mack SWA		Neotropical migrant nesting area		nc, a	mixed		North Central Plains/ Southeast Glacial Plains	Outagamie	
OUT32	SJP-01	Mosquito Hill Nature Center	430	Undisturbed bottom land hardwoods; wild rice	Invasives	nc, p, a, g	F, L, O	forest, agr, houses		Outagamie	Public
POR09	GWD-01	Emmons Creek SFA		Karner Blue butterfly population	Succession, Invasives	a	P	forest, agr	Central Sand Hills	Port	Pub/Priv
POR09	RH-07	Emmons Creek SFA		Savanna restoration, Karner blue habitat		nc, a			Central Sand Hills	Portage, Waupaca	
POR10	RH-08	Wolf Lake Park		Lake, savanna	Recreational use	nc	G, L		Central Sand Hills	Portage	Public
POR11	RH-09	Silver Lake Area		Lake, savanna	Development, logging	nc	G, L		Central Sand Hills	Portage	Private
POR12	RH-10	Waupaca River Tributary		Streams, woods, seepage springs		nc, g	F, S		Central Sand Hills	Portage	
POR13	MP-04	Lake Emily Road		Endangered species (Karner Blue)	Development	nc, p, a	P		Central Sand Hills	Port	
POR14	JEK-03	Trout Creek		Trout spawning area; significant riparian area	Development	nc, p, a	S	agr, forest	Central Sand Hills	Waupaca, Port	Pub/Priv
POR15	RH-17	New Hope Pines SNA		Forest communities: SDM, NDM, NW	Development, logging	nc, p, a	F, W, S, L		South Northeast Hills	Portage, Waupaca	
POR17	GWD-04	New Hope Pines SNA		Natural Area		nc, p	F, S	forest, agr	South Northeast Hills	Port	
POR19	GWD-03	Richard Hemp SFA		Poncho and Tomorrow Rivers	Invasives, pollution		F, S		Central Sand Hills	Port	
POR19	MJB-03	Richard Hemp SFA	2000	Diverse stream corridor; many nesting birds	Logging, Invasives	nc, a	G, F, S, L	agr	Central Sand Hills	Port	Pub/Priv
SHA22	RH-27	Wolf River south of Navarino				nc, p, a	F, W, S		North Central Plains/ Southeast Glacial Plains	Shawano, Waupaca, Outagamie	
SHA23	RH-26	White Lake		Shallow marl lake, veg.		nc, p	L		North Central Plains/ Southeast Glacial Plains	Shawano	
SHA23	SG-01	White Lake	190	hardstem bulrush, cattail, coontail. Wildlife habitat	subdivision, water quality, vegetation removal	nc, p, a	W, L	agr, homes	North Central Plains/ Southeast Glacial Plains	Shawano	private
SHA24	RH-28	Lund's Cedar		White cedar stand, orchids?		nc, p	F, W		North Central Plains/ Southeast Glacial Plains	Shawano	
SHA25	RH-29	Jung Hemlock SNA		Old growth mesic forest		nc	F	agr	North Central Plains/ Southeast Glacial Plains	Shawano	
SHA26	RH-35	Tigerton Forest		NM forest, exposed bedrock		nc, g	F, S		South Northeast Hills	Shawano	
SHA27	MM-06	Wolf River south of Keshena		Breeding bird area		a	S		North Central Plains/ Southeast Glacial Plains	Shawano, Menominee	
SHA29	MP-03	Navarino SWA		Over 200 bird species; rare plants	Mismanagement	nc, p, a			North Central Plains/ Southeast Glacial Plains	Shawano, Waupaca	
SHA29	RH-25	Navarino SWA				nc, p, a	G, F, W, S		North Central Plains/ Southeast Glacial Plains	Shawano, Outagamie	
WAP39	MM-03	Wolf River south of New London		Breeding bird area		a	F, W, S, L		North Central Plains/ Southeast Glacial Plains	Waupaca, Winnebago	
WAP40	RH-14	Lower Wolf River				nc, p, a	F, W, S, L		North Central Plains/ Southeast Glacial Plains	Waupaca	
WAP41	KK-01	Walleye Spawning Marshes		Known or historically identified walleye spawning areas	Development, changes in vegetation, changes in water flow (volume and direction)	nc, a, g	W, S, R	urban, agr, natural river bottomland	North Central Plains/ Southeast Glacial Plains	Shawano, Outagamie, Waupaca	Pub/Priv
WAP42	MWB-03	Templeton Bayou	10	Bald eagle nesting; marsh plants	Logging	p	W	forest, recreation	North Central Plains/ Southeast Glacial Plains	Waupaca	Private
WAP43	MWB-02	Big Cut Rookery	10	Blue heron rookery	Logging	nc, p	W, S	forest, recreation	North Central Plains/ Southeast Glacial Plains	Waupaca	Private
WAP44	MWB-01	Mukwa Indian Mounds	>1	Native American historic site		nc, o	W, S	forest, recreation	North Central Plains/	Waupaca	Private

Site ID	Source	Site Name	Acres	Resources of Significance	Threats/Disturbance Facors	Ecol Info	Habitat	Surrounding Land Use	Ecological Landscapes	County	Owner-ship
									Southeast Glacial Plains		
WAP45	RH-06	Radley Creek SNA		Shallow spring lake, emergent aqatics, breeding birds		nc, p, a	F, W		Central Sand Hills	Waupaca	
WAP46	TAC-03	Rasmussen Canal	40	Walleye spawning area	Siltation	nc, p, a, g	W, S	urban	North Central Plains/ Southeast Glacial Plains	Waupaca	Pub/Priv
WAP47	TAC-02	Cedar Creek Marsh	640	Large wetland filter area	Invasive plants	p, a, g	W, S	forest, agr	North Central Plains/ Southeast Glacial Plains	Waupaca	Private
WAP48	TAC-01	Cedar Creek Feeder	80	Endangered species	Development	nc, p, a	P, W, S, L	agr	North Central Plains/ Southeast Glacial Plains	Waupaca	Private
WAP49	RH-15	Flynn Lake		Bog, tamarack and spruce		nc, p	F, W, L		North Central Plains/ Southeast Glacial Plains	Waupaca	
WAP50	JEK-02	Little Wolf River		Bass fishery; significant riparian area; Native American historic site	Development, erosion & siltation, overharvest	nc, p, a, g	F, W, R	forest, agr	North Central Plains/ Southeast Glacial Plains	Waupaca	Private
WAP51	RH-16	Knutson Lake		Lake, tamarack and spruce		nc, p	W, L		South Northeast Hills	Waupaca	
WAP52	RH-19	Blake Creek Forest South Fork		Large patch of mature mesic forest		nc	F, W, S		South Northeast Hills	Waupaca	
WAP53	JEK-01	Griffin Creek	350	Griffin creek source; trout spawning area; significant riparian zone	Fragmentation, development	nc, p, a, g	mixed	forest, agr	South Northeast Hills	Waupaca	Private
WAP54	RH-24	Telloak's Hill SNA		Old-growth forest with rich ground layer		nc, p	F		North Central Plains/ Southeast Glacial Plains	Waupaca	
WAP55	RH-23	Shaw Creek Headwaters		Large patch of peatland and wetland forest		nc	W		North Central Plains/ Southeast Glacial Plains	Waupaca	
WAP56	SAN-05	Pigeon Lake	163	High floristic quality (Nichols 1999, J. Lake & Reservoir Mgmt.)		nc, p	L		North Central Plains/ Southeast Glacial Plains	Waupaca	
WAP57	RH-20	Keller-Whitcomb Forest		Large patch of mature NW, NWM forest		nc, p	F, S		South Northeast Hills	Waupaca	
WAP58	RH-22	Buck Lake Bog		Bog lake with conifer forest		nc, p	F, W, L		North Central Plains/ Southeast Glacial Plains	Waupaca	
WAP59	RH-18	Little Wolf River		Streams, inverts, forest communities: NM, NDM, NW	Logging	nc, p, a, g	F, W, S, L		South Northeast Hills		
WAP60	RH-21	Mud Lake Bog and Forest		Large patch of forest, many landforms	Logging	nc, p, g	F, W	agr	South Northeast Hills	Waupaca, Shawano	
WAP61	JEK-04	Tigerton Forest	4500	Unfragmented	Development (subdivision)	all	F, W, S, L		South Northeast Hills	Waupaca	Pub/Priv
WAP62	BER	Mud Lake - Radley Creek Savanna SNA		DNR State Natural Area					Central Sand Hills	Waupaca	Public
WAP63	BER	Pope Lake SNA		DNR State Natural Area					Central Sand Hills	Waupaca	Public
WAP64	RH-31	Poppy's Rock SNA		Prickly pear cactus		p			North Central Plains/ Southeast Glacial Plains	Waupaca	
WAP65	BER	Mukwa Bottomland Forest SNA		DNR State Natural Area					North Central Plains/ Southeast Glacial Plains	Waupaca	Public
WAP67	RH-11	Skunk-Foster Lakes SNA		Hardwater seepage lakes	Development	g	L		North Central Plains/ Southeast Glacial Plains	Waupaca, Portage	
WAP68	RH-34	Myklebust Lake SNA		Hardwater lake and fen		nc	W, L		South Northeast Hills	Waupaca	
WAP69	BER	Mud Lake Bog SNA		DNR State Natural Area					South Northeast Hills	Waupaca	Public
WAP70	MWB-04	Mukwa SWA	1000	State Scientific Area; Walleye and sturgeon spawning grounds	Development	nc, p, a	F, W, S	agr, forest, houses	North Central Plains/ Southeast Glacial Plains	Waupaca	
WAP70	TAC-04	Mukwa SWA	1500	Sturgeon spawning area; waterfowl breeding site	Neglect	nc, p, a, g	F, W, S, L	urban, agr	North Central Plains/ Southeast Glacial Plains	Waupaca	Pub/Priv
WIN09	KO-01	Harpers Point, Lake Winneconne	80	Cattail, bulrush area	Development	nc, p	W, L	houses, urban	North Central Plains/ Southeast Glacial Plains	Winnebago	Pub/Priv
WIN10	RH-13	WIWASH Trail Prairies		Wet-mesic prairies, Prairie white-fringed orchid		nc, p	G		North Central Plains/ Southeast Glacial Plains	Winnebago	
WIN11	MM-01	Lakes Poygan and Winneconne		Breeding bird area, terns, gulls		a	L		North Central Plains/ Southeast Glacial Plains	Winnebago	
WIN12	BRH-01	Clark Wetlands	442	Carex stricta, Calamagrostis canadensis, wet meadow, Yellow rail migration	Fragmentation, non-point pollution (agric.)	p, a	W	agr	North Central Plains/ Southeast Glacial Plains	Winnebago	Private
WIN12	RH-12	Clark Wetlands		Sedge meadow, rare plants, diversity		nc, p	W		North Central Plains/ Southeast Glacial Plains	Winnebago	

Site ID	Source	Site Name	Acres	Resources of Significance	Threats/Disturbance Facors	Ecol Info	Habitat	Surrounding Land Use	Ecological Landscapes	County	Owner-ship
WIN13	BRH-03	Dale Rd wet woods		Wet woods, wetland songbirds nesting site		p, a	F, W	agr, wetl, res, DNR	North Central Plains/ Southeast Glacial Plains	Winnebago	Private
WSA24	SAN-11	Lake Morris	163	High floristic quality (Nichols 1999, J. Lake & Reservoir Mgmt.)		nc, p	L		Central Sand Hills	Waushara	
WSA25	RH-02	Norwegian Lake		Savanna, oak/pine woods, hardwater lake, marl flats	Development	nc, p	G, F, L		Central Sand Hills	Waushara	
WSA26	RH-01	Badger Drive Hills		Savanna restoration		nc	G	agr	Central Sand Hills	Waushara	
WSA27	RH-03	Little Silver Creek Springs		Spring pond		nc	L		Central Sand Hills	Waushara	
WSA28	SAN-10	Lake Napowan	51	High floristic quality (Nichols 1999, J. Lake & Reservoir Mgmt.)		nc, p	L		Central Sand Hills	Waushara	
WSA29	RH-04	Timan Lake and Savanna		Savanna restoration, oak woods, hardwater lakes, Karner blue habitat	Development	nc, p, a	G, F, L		Central Sand Hills	Waushara	
WSA30	RH-05	Pine River		Floodplain forest, oak/white pine woods, spring ponds	Logging	nc	F, L		Central Sand Hills	Waushara	
WSA31	MM-02	Poygon Marsh SWA		Breeding bird area		a	W, L		Central Sand Hills	Waushara	
	MXM-01	Wolf River, Shiocton to Partridge Lake		River morphology, riparian zones and floodplain wetlands	Manipulation of floodplain morphology, flow	g	W, S	agr		Waupaca, Outagamie	Pub/Priv

Expert Site Table Legend

Site ID: Code includes County abbreviation and sequential numbering of all sites in each county. Expert site numbers start after the last Coarse Filter Screening site number.

Source: Code from original expert site submission prior to the Experts Workshop. Letter code includes initials of submitting expert.

Site Name: From name of most important geographical features of site.

Acres: Provided only if included on site information form by the submitting expert.

Ecol Info: Ecological Information provided on the site information form by the submitting expert: nc=natural community; p=plants; a=animal; g=geologic feature; o=other

Habitat: Provided on the site information form by the submitting expert: G=grassland; F=forest; W=wetland; S=stream; L=lake; O=other

Surrounding Land Use: Provided on the site information form by the submitting expert.

Ecological Landscape: Lists the ecological landscapes the site falls within.

Ownership: Provided only if included on site information form by the submitting expert.

Attachment D. Significance Ranking Sheets from Workshop Groups

Significant Ecological Sites in the Wolf River Basin
North Northeast Hills – Group #1

Criteria	Site ID or Site Grouping							
	NNCF1= FOR 02,10,111 2,13	NNCF4= LAN 10,25,26 28,30, 31,33	NNCF5= LAN 11,24 (and W. River Corr. To Men. Line)	NNCF8= FOR 03	NNCF7= FOR 08	NNCF2= ONE 02,03.04	NNCF3= FOR05	NNCF6= Lawrence Lake
Coarse Filter and Expert Sites overlap and/or cluster	H	H	H	M	M	M	M	M
Large, unfragmented natural areas	H	H	M	L	H	H	H	H
Potential connectivity with other important sites	H	H	H	L	M	H	L	L
Critical habitat area for plants or animals	H	H	H	H	H	H	U	H
Uncommon or rare natural communities *	H	H	H	H	U	H	U	U
Uncommon or rare plants, animals, other features*	U	U	H	U	U	U	U	U
Well-functioning and intact natural communities	H	H	M	M	M	H	H	H
Potential natural community restoration	L	L	M	H	M	L	L	L

Significance: **H** = high **M** = medium **L** = low **U** = no information

* Please indicate if this information is from NHI Element Occurrences from the NHI or from Expert Site Information

Significant Ecological Sites in the Wolf River Basin
South Northeast Hills – Group #2

Criteria	Site ID or Site Grouping							
	Men. County – Stock Bridge	Tigerton Lumber 25-27 /60-61	Upper reaches Little Wolf – 59	New Hope Pines 14,15, 17	Gardner Dam Boy Scout Camp LAN15	SHA 18	SHA 20/17	WAP 57 K. W. Woods
Coarse Filter and Expert Sites overlap and/or cluster	H	H	Just expert	H	Just expert	H	H	H
Large, unfragmented natural areas	H	M	Narrow corridor	L	M	H	H	M
Potential connectivity with other important sites	H	H	H	H	H	H	H	M
Critical habitat area for plants or animals	H	?	U	H	U	H	M	U
Uncommon or rare natural communities *	H	H	U	U	U	M	M	H
Uncommon or rare plants, animals, other features*	H	H	M	U	U	M	M	M
Well-functioning and intact natural communities	H	U	M	L	H	M	M	H
Potential natural community restoration	Intact	H	H	H	Intact	L	L	M

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Sensitivity of Sites in the Wolf River Basin

South Northeast Hills – Group #2

- Time allowed only for the identification of sensitivity issues for the sites in a general sense. The issues are:
  a. Hwy. Expansion
  b. 20-40's suburbanization, high rural land ownership
  c. Deer (eating vegetation)
  d. Beaver (flooding
  e. Crandon Mine
  f. Hydrolic changes
  g. Exotics: spotted knapweed, purple loosestrife, reed canary grass, and animals/parasites

Significant Ecological Sites in the Wolf River Basin
South Northeast Hills – Group #3

Criteria	Site ID or Site Grouping									
	SHA 04	SHA 12	SHA 18	SHA 20	LAN 13	LAN 20	LAN 15	LAN 08, 38	WAP 59	MRN 12
Coarse Filter and Expert Sites overlap and/or cluster	H	H	H	H	M	H	M	H	L	L
Large, unfragmented natural areas	M	L	H	H	M	M	M	M	M	M
Potential connectivity with other important sites	M	L	H	H	H	H	H	H	H	M
Critical habitat area for plants or animals	M	M	H	M	H	H	H	M	H	H
Uncommon or rare natural communities *	M	M	M	M	M	L	H	H	U	H
Uncommon or rare plants, animals, other features *	M	M	M	M	M	M	H	H	H	H
Well-functioning and intact natural communities	M	L	M	M	H	H	H	H	H	U
Potential natural community restoration	L	H	L	L	H	L	H	H	U	M
Inventory	***	*****	**	***	****	****	**	**	***	
Conservation	****	*****	**	***	***** *	***	**	*****	**	

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Significant Ecological Sites in the Wolf River Basin
South Northeast Hills – Group #3, p. 2

	Site ID or Site Grouping								
Criteria	WAP 26, 27	WAP 60,61	WAP 34,36	WAP 51,52					
Coarse Filter and Expert Sites overlap and/or cluster	H	H	H	H					
Large, unfragmented natural areas	H	H	M	M					
Potential connectivity with other important sites	H	H	M	M					
Critical habitat area for plants or animals	M	M	M	M					
Uncommon or rare natural communities *	U	U	U	U					
Uncommon or rare plants, animals, other features *	U	U	U	U					
Well-functioning and intact natural communities	H	H	H	H					
Potential natural community restoration	H	M	H	U					
Inventory	*	****		*					
Conservation			**	*					

Significance: **H** = high **M** = medium **L** = low **U** = no information

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Significant Ecological Sites in the Wolf River Basin
Northeast Plains / Southeast Glacial Plains – Group #4

	Site ID or Site Grouping								
Criteria	SHA 07	OUT 07 OUT 29	OUT 06 OUT 30	WIN 01	WIN 12	MEN 01	WIN 13		
Coarse Filter and Expert Sites overlap and/or cluster	H	H	H	H	U	U	U		
Large, unfragmented natural areas	H	L	H	H	H	H	M		
Potential connectivity with other important sites	H	L	L	H	H	H	H		
Critical habitat area for plants or animals	H	H	H	H	H	H	H		
Uncommon or rare natural communities *	H	H	H	U	H	M	U		
Uncommon or rare plants, animals, other features *	H	H	H	H	H	H	U		
Well-functioning and intact natural communities	H	M	M	H	H	H	M		
Potential natural community restoration	U	U	U	U	U	U	U		
* Group feels need for inventory and protection (sensitive)	*	*	*	**	**		*		

Significance: **H** = high **M** = medium **L** = low **U** = no information

* Please indicate if this information is from NHI Element Occurrences from the NHI or from Expert Site Information

Significant Ecological Sites in the Wolf River Basin
Northeast Plains / Southeast Glacial Plains – Group #5

Criteria	Site ID or Site Grouping											
	WAP 39-48	WSA 07 WSA 31	WAP 49	OUT 21	OUT 13	OUT 32	OUT 30 OUT 06	SHA 29	SHA 23	Lower Little Wolf 01	Prairie Remnant 01	OUT 07
Coarse Filter and Expert Sites overlap and/or cluster	H	H	H	L	L	H	H	H	L	U	U	H
Large, unfragmented natural areas	H	H	H/M	L	H	H	H	H	L	H	L	M
Potential connectivity with other important sites	H	M	H	H	L	H	M	H	L	H	L	L
Critical habitat area for plants or animals	H	H	H	H	H	H	H	H	H	H	H	H
Uncommon or rare natural communities *	H	L	H	L	H	M	H	H	L	H	H	H
Uncommon or rare plants, animals, other features *	H	H/M	H/M	L	H	H	H	H	H	H	H	H
Well-functioning and intact natural communities	M	M	H	L	H	H	H	H	M	M	L	H
Potential natural community restoration	H	H	H	L	L	L	L	M	L	H	H	L
* Future Needs for	**		**	**		*				*	**	*

Significance: **H** = high **M** = medium **L** = low **U** = no information

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Significant Ecological Sites in the Wolf River Basin
Central Sand Hills – Group #6

	Site ID or Site Grouping						
Criteria	CHS 1 Emmons Creek	CHS 2 Wolf – Silverf	CHS 3 Pickeral Lake	CHS 4 Tomorrow River	CHS 5 Pine River	CHS 6 Sand Pr./Sav pot.	Cold water streams complex
Coarse Filter and Expert Sites overlap and/or cluster	H	M	L	L	H	N/A	N/A
Large, unfragmented natural areas	M	L	L	M	M	L	M
Potential connectivity with other important sites	H	L	L	M	M	L	H
Critical habitat area for plants or animals	H	L	H	M	M	H?	H?
Uncommon or rare natural communities *	L	L	L	H (NHI	H (NHI)	H (NHI	?
Uncommon or rare plants, animals, other features *	H	L	H	H	H	H	?
Well-functioning and intact natural communities							
Potential natural community restoration	H	L	L	H	?	H	H?
*Threats and Disturbance	M	H	H	H	?	H	H
*Statewide Importance	M	?	H	?	?	M	H

Significance: **H** = high **M** = medium **L** = low **U** = no information

- Please indicate if this information is from NHI Element Occurrences from the NHI or from Expert Site Information